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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,731	09/12/2003	In Hec Han	9988.056.00-US	4916
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MCKENNA LONG & ALDRIDGE LLP 1900 K STREET, NW WASHINGTON, DC 20006			EXAMINER LU, JIPING	
			ART UNIT	PAPER NUMBER
			3749	
			MAIL DATE	DELIVERY MODE
			05/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/660,731

Applicant(s)

HAN, IN HEE

Examiner

Jiping Lu

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 7 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 15-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Status*

1. Claims 1-3, 7, 15-17 are pending in the case. Claims 4-6, 8-14 and 18-20 have been canceled.

### *Claim Rejections - 35 USC § 102*

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

3. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Anetsberger (U. S. Pat. 3,217,704).

Anetsberger shows a dryer 24 (capable for clothes drying) comprising: cabinet 24, a mixing pipe 49 having an inlet 52 disposed in the cabinet 24 for mixing air and gas, and a hole 23 configured to allow the air to directly flow into the mixing pipe 49 from outside the dryer which are arranged same as claimed. The hole 23 is provided at a bottom portion 11 of the dryer 24 and in front of and adjacent only to inlet 52 of the mixing pipe 49. The hole 23 is positioned such that the air flows through the holes and it focused in a region immediately surrounding the mixing pipe 49, wherein the air mixes with gas supply to enhance combustion efficiency. It is noted that the distance between the hole 23 at the bottom of the dryer and the air inlet 52 has a shortest distance when comparing with hole 24. Therefore, it is considered the hole 23 is adjacent "only to" the inlet 52 by distance. It must be noted that it is common practice and well

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known in the art to have combustion air holes near the burner fuel gas and air mixture inlet for thorough mixing in combustion art.

4. Claims 7 and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Ros (GB 2,090,398).

Ros shows a dryer 1 (capable for clothes drying) comprising: cabinet 2, a mixing pipe (not numbered, see Fig. 1, within 3) having an inlet disposed in the cabinet 2 and one or more holes 20 configured to allow the air to directly flow into the mixing pipe from outside the dryer same as claimed. The one or more holes 20 are provided at a bottom portion 18 of the dryer 1 and in front of and adjacent only to inlet of the mixing pipe. The holes 20 are positioned such that the air flows through the holes and it focused in a region immediately surrounding the mixing pipe wherein the air mixes with gas supply to enhance combustion efficiency. The holes 20 are formed at regular intervals in left and right directions along the bottom portion of the dryer and are formed in a long hole form having length in a front and rear direction along the bottom portion of the dryer (see Fig. 9). It is noted that the distance between the hole 20 at the bottom of the dryer and the air inlet of the mixing pipe at 3 has a shortest distance when comparing with hole 19. Therefore, it is considered the hole 20 is adjacent "only to" the inlet at 3 by distance. It must be noted that it is common practice and well known in the art to have combustion air holes near the burner fuel gas and air mixture inlet for thorough mixing in combustion art.

*Claim Rejections - 35 USC § 103*

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-3, 7, 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fig 3 of applicant's admitted prior art in view of Ros (GB 2,090,398 A).

Fig. 3 of applicant's admitted prior art shows a clothes dryer same as claimed except for a plurality of air holes in a bottom of a base adjacent only an inlet side of a mixing pipe. The only difference between the prior art Fig. 3 and the current alleged invention is air hole 100 at the bottom portion of the dryer adjacent only to the inlet side of a mixing pipe 24 as shown in Fig. 5 of the application. Ros teaches a heater with a plurality of air holes 20 in a bottom of a base 18 adjacent only to an inlet side of a mixing pipe (not numbered, see Fig. 1). The holes 20 are positioned such that the air flows through the holes and is focused in a region immediately surrounding the mixing pipe. The holes 20 are formed at regular intervals in left and right directions along the bottom portion of the dryer and are formed in a long hole form having length in a front and rear direction along the bottom portion of the dryer (see Fig. 9). It is noted that the distance between the hole 20 at the bottom of the dryer and the air inlet of the mixing pipe at 3 has a shortest distance when comparing with hole 19. Therefore, it is considered the hole 20 is adjacent "only to" the inlet at 3 by distance. It must be noted that it is common practice and well known in the art to have combustion air holes near the burner fuel gas and air mixture inlet for thorough mixing in combustion art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the bottom of the base of

the clothes dryer of Fig. 3 of applicant's admitted prior art with a plurality of air holes as taught by Ros in order to improve the combustion efficiency.

### ***Response to Arguments***

7. Applicant's arguments filed on 2/16/07 with respect to claims have been considered but are not persuasive to overcome the rejection. First, broad claims fail to structurally define over the prior art references. For example, claim 7 merely calls for a mixing pipe with an inlet for mixture of gas and air and a hole at the bottom adjacent only to the inlet (by distance). In particular, on page 5 of Remarks, the applicant argues that Anetsberger fails to show "one or more holes configured to allow the air to directly flow into the mixing pipe from outside of the clothes dryer, the on or more holes being provided at the bottom portion of the clothes dryer". The examiner disagrees. The claimed "one or more holes configured to allow the air to directly flow into the mixing pipe from outside of the clothes dryer, the on or more holes being provided at the bottom portion of the clothes dryer" is clearly shown by the patents to Anetsberger and Ros as stated in the rejection above. Second, the applicant argues that Anetsberger's deep fat fryer is not clothes dryer. This argument is not persuasive because the broadly claims "clothes dryer" in claims 1 and 7 include no specific structure to dry "clothes". Therefore, the deep fat dryer of Anetsberger of course is capable to dry clothes due to its heat dissipation in the surrounding area. The applicant could have easily amended the broad claims 1 and 7 to include clothes drying structures. Third, on page 6 of Remarks, the applicant argues that Ros patent fails to show "one or more holes configured to allow the air to directly flow into the mixing pipe from outside of the clothes dryer, the on or more holes being provided at the bottom portion of the

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clothes dryer". The examiner disagrees. The claimed "one or more holes configured to allow the air to directly flow into the mixing pipe from outside of the clothes dryer, the on or more holes being provided at the bottom portion of the clothes dryer" is clearly shown by the patent to Ros as stated in the rejection above. The applicant also argues that Ros's domestic gas heater is not clothes dryer. This argument is not persuasive because the broadly claims "clothes dryer" in claims 1 and 7 include no specific structure to dry "clothes". Therefore, the domestic gas heater of Ros of course is capable to dry clothes due to its heat dissipation in the surrounding area. The applicant could have easily amended the broad claims 1 and 7 to include clothes drying structures. Finally, on page 7 of the Remarks, the applicant traverses the rejection of all claims under 35 USC 103 as unpatentable over Figs 1-3 of SN 10/660731 in view of Ros because there is no teaching or suggestion. The examiner disagrees. Fig. 3 of applicant's admitted prior art shows a clothes dryer identical to the claimed dryer except for a plurality of air holes in a bottom of a base adjacent only an inlet side of a mixing pipe. The only difference between the prior art Fig. 3 and the current alleged invention is air hole 100 at the bottom portion of the dryer adjacent only to the inlet side of a mixing pipe 24 as shown in Fig. 5 of the application. Ros teaches a heater with a plurality of air holes 20 in a bottom of a base 18 adjacent only to an inlet side of a mixing pipe (not numbered, see Fig. 1). The holes 20 are positioned such that the air flows through the holes and is focused in a region immediately surrounding the mixing pipe. The holes 20 are formed at regular intervals in left and right directions along the bottom portion of the dryer and are formed in a long hole form having length in a front and rear direction along the bottom portion of the dryer (see Fig. 9). It is noted that the distance between the hole 20 at the bottom of the dryer and the air inlet of the mixing pipe at 3 has a shortest distance when

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comparing with hole 19. Therefore, it is considered the hole 20 is adjacent "only to" the inlet at 3 by distance. It is common practice and well known in the combustion art to have combustion air holes near the burner fuel gas and air mixture inlet for thorough mixing. Therefore, it is the examiner's position that it would have been obvious to one skilled in the art to merely provide the bottom of the base of the clothes dryer of Fig. 3 of applicant's admitted prior art with a plurality of air holes as taught by Ros in order to improve the combustion efficiency.

### *Conclusion*

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

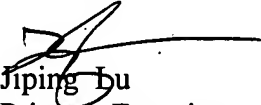
9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jiping Lu whose telephone number is 571 272 4878. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:30 PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, KENNETH RINEHART can be reached on 571 272-4881. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Jiping Lu  
Primary Examiner  
Art Unit 3749

J.L.